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INDEX 'ADISCTI, ADISINSIGHT, ADISNEWS, AGRICOLA, ANABSTR, AQUASCI, BIOBUSINESS, BIOCOMMERCE, BIOSIS, BIOTECHABS, BIOTECHDS, BIOTECHNO, CABA, CANCERLIT, CAPLUS, CEABA-VTB, CEN, CIN, CONFSCI, CROPB, CROPU, DDFB, DDFU, DGENE, DRUGB, DRUGLAUNCH, DRUGMONOG2, ...' ENTERED AT 12:19:28 ON 09 SEP 2003

SEA (CELZ OR CELY OR EGZ OR EGY)

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FILE 'MEDLINE, CABA, PROMT, AGRICOLA, PASCAL, EMBASE, USPATFULL' ENTERED AT 12:20:33 ON 09 SEP 2003

L2 114 S L1 AND ERWINIA

L1

L3 6 S L2 AND SYNERG?

L4 4 DUP REM L3 (2 DUPLICATES REMOVED)

=> d 14 ibib ab 1-4

L4 ANSWER 1 OF 4 USPATFULL on STN

ACCESSION NUMBER: 2002:287131 USPATFULL

TITLE: Methods and compositions for simultaneous

saccharification and fermentation

INVENTOR(S): Ingram, Lonnie O?apos, Neal, Gainesville, FL, UNITED

STATES

Zhou, Shengde, Gainesville, FL, UNITED STATES

NUMBER DATE

PRIORITY INFORMATION: US 2000-214137P 20000626 (60)

US 2000-219913P 20000721 (60)

DOCUMENT TYPE: Utility
FILE SEGMENT: APPLICATION

LEGAL REPRESENTATIVE: LAHIVE & COCKFIELD, 28 STATE STREET, BOSTON, MA, 02109

NUMBER OF CLAIMS: 110 EXEMPLARY CLAIM: 1

NUMBER OF DRAWINGS: 18 Drawing Page(s)

LINE COUNT: 4754

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The invention provides compositions and methods for the

synergistic degradation of oligosaccharides by endoglucanases.

The invention further provides recombinant host cells containing one or

more genes encoding endoglucanses which are capable of the synergistic degradation of oligosaccharides. Preferred host

cells of the invention are ethanologenic and capable of carrying out

simultaneous saccharification and fermentation resulting in the

production of ethanol from complex cellulose substrates

L4 ANSWER 2 OF 4 USPATFULL on STN

ACCESSION NUMBER: 2000:57569 USPATFULL

TITLE: Extracellular expression of cellulose binding domains

(CBD) using Bacillus

INVENTOR(S): Bjornvad, Mads Eskelund, Frederiksberg, Denmark

Schulein, Martin, Kobenhavn O, Denmark Jorgensen, Per Lina, Kobenhavn K, Denmark

PATENT ASSIGNEE(S): Novo Nordisk A/S, Bagsvaerd, Denmark (non-U.S.

corporation)

NUMBER DATE

PRIORITY INFORMATION: DK 1996-1192 19961028 DK 1996-1426 19961213

DOCUMENT TYPE: Utility FILE SEGMENT: Granted

PRIMARY EXAMINER: Carlson, Karen Cochrane

ASSISTANT EXAMINER: Srivastava, Devesh

LEGAL REPRESENTATIVE: Zelson, Esq., Steve T., Green, Esq., Reza

NUMBER OF CLAIMS: 20 EXEMPLARY CLAIM: 1

NUMBER OF DRAWINGS: 2 Drawing Figure(s); 2 Drawing Page(s)

LINE COUNT: 1061

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

The present invention relates to Bacillus hosts transformed with a vector comprising a DNA sequence encoding for a cellulose binding domain (CBD) and capable of expressing said sequence, the expressed polypeptide protein consisting essentially of one or more non-catalytic domains; the cellulose binding domain having a molecular weight in the range of from 4 kD to 35 kD and being obtainable from a microorganism or from a plant, preferably from a bacterium or a fungus; the Bacillus host e.g. being one of the species Bacillus subtilis, Bacillus licheniformis, Bacillus megaterium, Bacillus stearothermophilos, and Bacillus amyloliquefaciens; and a Bacillus expression vector carrying an inserted DNA sequence encoding for a cellulose binding domain; and a method for producing a cellulose binding domain polypeptide in a Bacillus host cell.

L4 ANSWER 3 OF 4 MEDLINE on STN DUPLICATE 1

ACCESSION NUMBER: 2001010989 MEDLINE

DOCUMENT NUMBER: 20461212 PubMed ID: 11004164

TITLE: Synergistic hydrolysis of carboxymethyl cellulose

and acid-swollen cellulose by two endoglucanases (

CelZ and CelY) from Erwinia

chrysanthemi.

AUTHOR: Zhou S; Ingram L O

CORPORATE SOURCE: Institute of Food and Agricultural Sciences, Department of

Microbiology and Cell Science, University of Florida,

Gainesville, Florida 32611, USA.

SOURCE: JOURNAL OF BACTERIOLOGY, (2000 Oct) 182 (20) 5676-82.

Journal code: 2985120R. ISSN: 0021-9193.

PUB. COUNTRY: United States

DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)

LANGUAGE: English

FILE SEGMENT: Priority Journals

ENTRY MONTH: 200010

L4

ENTRY DATE: Entered STN: 20010322

Last Updated on STN: 20010322 Entered Medline: 20001026

Erwinia chrysanthemi produces a battery of hydrolases and lyases ABwhich are very effective in the maceration of plant cell walls. Although two endoglucanases (CelZ and CelY; formerly EGZ and EGY) are produced, CelZ represents approximately 95% of the total carboxymethyl cellulase activity. In this study, we have examined the effectiveness of CelY and Celz alone and of combinations of both enzymes using carboxymethyl cellulose (CMC) and amorphous cellulose (acid-swollen cellulose) as substrates. Synergy was observed with both substrates. Maximal synergy (1.8-fold) was observed for combinations containing primarily CelZ; the ratio of enzyme activities produced was similar to those produced by cultures of E. chrysanthemi. CelY and CelZ were quite different in substrate preference. CelY was unable to hydrolyze soluble cellooligosaccharides (cellotetraose and cellopentaose) but hydrolyzed CMC to fragments averaging 10.7 glucosyl units. In contrast, CelZ readily hydrolyzed cellotetraose, cellopentaose, and amorphous cellulose to produce cellobiose and cellotriose as dominant products. CelZ hydrolyzed CMC to fragments averaging 3.6 glucosyl units. In combination, CelZ and CelY hydrolyzed CMC to products averaging 2.3 glucosyl units. Synergy did not require the simultaneous presence of both enzymes. Enzymatic modification of the substrate by CelY increased the rate and extent of hydrolysis by CelZ Full synergy was retained by the sequential hydrolysis of CMC, provided CelY was used as the first enzyme. A general

ANSWER 4 OF 4 PASCAL COPYRIGHT 2003 INIST-CNRS. ALL RIGHTS RESERVED. on

mechanism is proposed to explain the **synergy** between these two enzymes based primarily on differences in substrate preference.

STN

ACCESSION NUMBER:

PASCAL 1999-0052122

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TITLE (IN ENGLISH):

TITLE (IN FRENCH):

Study of a locus from the phytopathogenic bacterium

Erwinia chrysanthemi 3937 encoding a pectate lyase and a peptidyl prolyl cis-trans isomerase

Etude d'un locus de la bacterie phytopathogene

Erwinia chrysanthemi 3937 codant une pectate

lyase et une peptidyl prolyl cis-trans isomerase PISSAVIN Christine; HUGOUVIEUX COTTE PATTAT Nicole

(dir.)

CORPORATE SOURCE:

Universite de Paris 07, Paris, France (tutelle)

SOURCE:

(1997-04), 270 refs.

181 p.

Dissertation Information: Universite de Paris 07.

Paris. FRA, Th. doct., 97PA077265

DOCUMENT TYPE:

BIBLIOGRAPHIC LEVEL:

Dissertation Monographic

COUNTRY:

France

LANGUAGE:

AUTHOR:

French

SUMMARY LANGUAGE:

French; English

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T97PA077265 0000